From the Captain to the Cook
What do the Captain and Cook have to do with construction mega projects?

Nothing!

But! There is something to be learned

• Shared Goals
• Shared Training
• Shared Language
• Well defined organization structure
Problems for Mega-Projects

• Large cost over runs and schedule delays
  – People shortages
  – Material shortages
  – No shared or at best inconsistent goals
  – Little or no shared training
  – No or defacto shared language

• Litigious

• Outdated business model
  – Minimize costs
Workface Planning

- Establish Common Framework
- Establish Common Priorities
  - Construction Driven
- Use of similar terminology
  - Is FIWP or FWP
- Documentation
Workface Planning Issues

• New concept- not fully developed or proven
• Varies from Org to Org
• No shared training
• No common language
• Support systems
  – WFP Systems are new and do not address complete scope
  – Few standards
  – Data integration issues
  – Many ad hoc programs
• Not a complete solution
The Multi-Objective Problem

Minimize Costs

Workface Planning → System Optimum
Captain to Cook Redux

How did we get the Captain and Cook on the same page?

- Training!
- Training!
- Qualification
- Organization!
- And assessment.
The Submarine Model

- Expert training – Each prospective crewmember is already trained in a specialty area
- Platform Training – 3 to 6 month Submarine School
- Qualification – One year on board training lead to qualification as Submariner
- Continued training – Leading to increased responsibility
- Assessment
Expert Training

- Machinist
- Electrician
- Electronic Tech
- Commissaryman (the Cook)
- Engineering (the Officers)
- Management Trainees (the Officers)
- Management (the Captain)
Platform Training

- Submarine School – All
  - Training in all aspects of submarine operations
  - Classroom
  - Simulator training
  - Safety training
  - Common Language
Onboard Training

Training

• On board training – All
  – Overall training on all aspects of operations and systems
  – Hands on training on unique systems
  – Conducted by senior crewmembers
Qualification

• Earning your Dolphins
  – Written exam
  – Oral exams and walk through
  – Recognition
Captain Qualification

- Successfully performed in all division officer billets
- Served as Executive Officer
- Attend Prospective Commanding Officer program – 3 to 6 month assignment
- Qualify for Command
Recommendation

• Establish universal Workface Planning program
• Establish company specific training programs for all levels
• Develop qualification program for all levels
• Develop Assessment tools for individual and team
Universal Training

- All must attend
- Standardized across stakeholders
- Available online or through stakeholder networks
- Cost effective
- Continuing education
Company Specific Training

- All must attend
- Train in company specific implementation
- Available online or through stakeholder networks
- Cost effective
- Continuing education
Qualification Program

- On the job demonstration of Workface Planning knowledge
- Recognize qualification
- Qualification transferrable
- Renew qualification by project or employer
Recommendations

• Establish Project Manager Career Path and Qualification program

• Need to move beyond PMI or upgrade PMI training

• Develop contact language to give Project Manager “Captain Like” authority over project resources and performance